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014468710 **Image available** WPI Acc No: 2002-289413/200233

XRAM Acc No: C02-084841

Method for manufacturing semiconductor device using hydrogen annealing

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Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week KR 2001026744 A 20010406 KR 9938171 A 19990908 200233 B

Priority Applications (No Type Date): KR 9938171 A 19990908

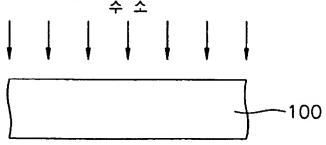
Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

NOVELTY - A method for manufacturing a semiconductor device using a hydrogen annealing process is provided to cure a defect in processes for forming a gate oxide layer, pad oxide layer or trench isolation, by performing the annealing process at a low temperature and within a reduce interval of time.

DETAILED DESCRIPTION - A silicon surface of a semiconductor substrate is exposed. Hydrogen is supplied to the surface of the silicon substrate and annealed in a high vacuum state from 10-2 Torr to 10-9 Torr to cure a defect existing in the silicon surface. The annealing process is performed within a temperature scope from about 650 deg.C to 850 deg.C.

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Title Terms: METHOD; MANUFACTURE; SEMICONDUCTOR; DEVICE; HYDROGEN; ANNEAL

Derwent Class: L03; U11

International Patent Class (Main): H01L-021/324

File Segment: CPI; EPI

Manual Codes (CPI/A-N): L03-D01 Manual Codes (EPI/S-X): U11-C03J

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